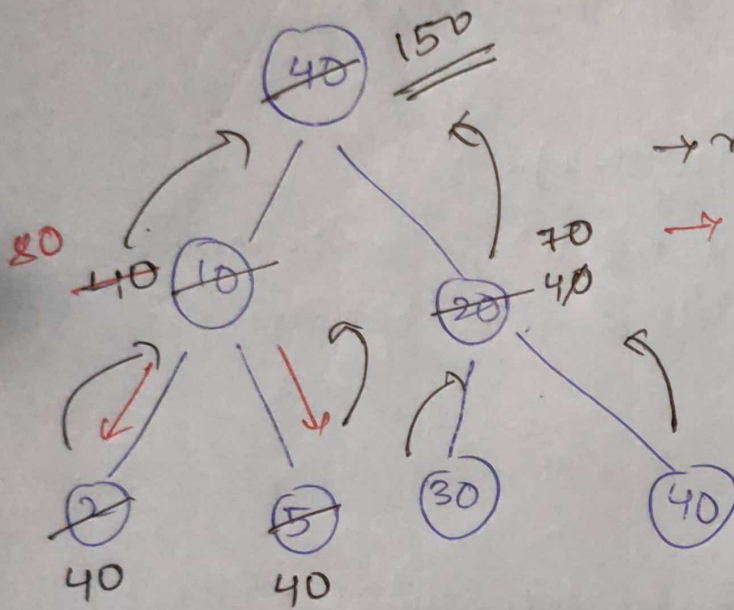
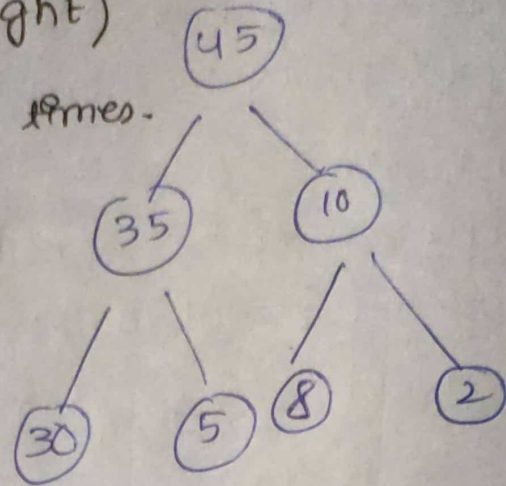
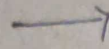
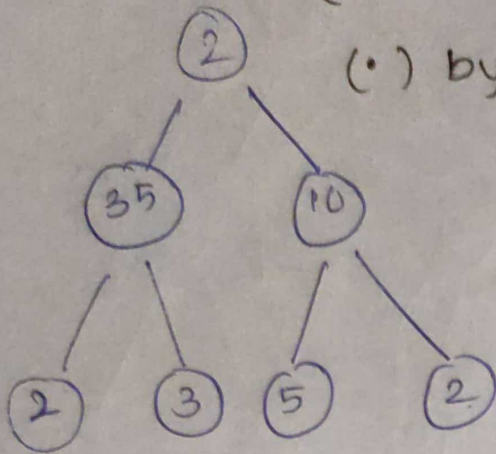


Children Sum Property in Binary Tree:-

(node = left + right)

(*) by +1 any times.



$$10 + 20 = 30 < 40$$

→ reassign both to 40

→ move left, right.

$$2 + 5 = 7 < 40$$

reassign.

→ move left, right

== NULL

return

add them.

Right subtree

$$30 + 40 = 70$$

no left, right

return

code :-

void ^{reorder} changeTree (BTNode <int> * root) {

if (root == NULL) return;

int child = 0;

if (root->left) {

child += root->left->data;

}

if (root->right) {

child += root->right->data;

}

if (child > root->data) root->data = child;

else {

if (root->left) root->left->data = root->data;

else if (root->right) root->right->data = root->data;

}

reorder (root->left);

reorder (root->right);

int tot = 0;

if (root->left) tot += root->left->data;

if (root->right) tot += root->right->data;

if (root->left or root->right) root->data = tot;

}

void changeTree (BT <int> * root) {

reorder (root);

}